DOCUMENT RESUME

ED 121 595 95 SE 020 599

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TITLE Environmental Education: Perspectives and Prospectives. Key Findings and Major Recommendations.
INSTITUTION ERIC Information Analysis Center for Science, Mathematics, and Environmental Education, Columbus, Ohio.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Dec 75
NOTE 28p.; Report of a conference (Snowmass, Colorado, July 6-12, 1975); For a related document, see SE 020 726
AVAILABLE FROM Information Reference Center (ERIC/IRC), The Ohio State University, 1200 Chambers Road, 3rd Floor, Columbus, Ohio 43212 ($1.00)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS Committees; *Conference Reports; *Educational Assessment; *Educational Objectives; Educational Research; Elementary Secondary Education; *Environmental Education; Higher Education; *Problems; Program Evaluation

ABSTRACT

This publication is a report of an Environmental Education Conference sponsored by the Alliance for Environmental Education and Western Regional Environmental Education Council at Snowmass, Colorado. The purpose of the conference was to study the progress of environmental education throughout the nation, to report the major concerns, and to make recommendations to best solve existing problems. Participants from the entire country served on the different conference committees. Concerns reported include the relationships of environmental education to the federal and state governments; business, industry, and labor; elementary, secondary, and higher education; information services; communications and dissemination; private environmental organizations; and leadership in environmental education. Committee reports are included in the publication and are organized, by concern, into findings and recommendations. Included at the end of the conference report is a listing of the different committees and participants. (MA)

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ED121595

environmental education:

perspectives & prospectives

Key Findings and Major Recommendations

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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ENVIRONMENTAL EDUCATION PERSPECTIVES AND PROSPECTIVES

A report of a conference held July 6-12, 1975, at Snowmass, Colorado, to determine the current status of environmental education nationally, to establish long and short range objectives, and to suggest strategies for achievement of those objectives.

KEY FINDINGS AND MAJOR RECOMMENDATIONS

Edited by

Rudolph J. H. Schafer
and
John F. Disinger

The Conference was sponsored by

ALLIANCE FOR ENVIRONMENTAL EDUCATION

and

WESTERN REGIONAL ENVIRONMENTAL EDUCATION COUNCIL

Published by

ERIC Center for Science, Mathematics,
and Environmental Education
The Ohio State University
1200 Chambers Road, 3rd Floor
Columbus, Ohio 43212

December 1975

ENVIRONMENTAL EDUCATION INFORMATION REPORTS

Environmental Education Information Reports are issued to analyze and summarize information related to the teaching and learning of environmental education. It is hoped that these reports will provide information for personnel involved in development, ideas for teachers, and indications of trends in environmental education.

Your comments and suggestions for this series are invited.

John F. Disinger
Associate Director
Environmental Education

Publication sponsored by the Educational Resources Information Center of the National Institute of Education and The Ohio State University.

This publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. This manuscript was developed from materials prepared by participants in the Snowmass Conference on Environmental Education and has been reviewed by members of that group, as well as by the Alliance for Environmental Education. Points of view or opinions, however, do not necessarily represent the official views or opinions of the Alliance for Environmental Education or its member organizations, or of the National Institute of Education.

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November 17, 1975

Mr. Rudolph J. H. Schafer
Consultant in Environmental Education
California State Department of Education
721 Capitol Mall
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Dear Mr. Schafer:

Concern, especially among young people, about the dangers to our environment goes far beyond protests against the pollution of land, air, and water.

I believe--and I do not think that champions of a clean environment would disagree--that if we are to be able to make substantial progress in meeting the ecological crisis, we must have a citizenry informed and educated about the whole spectrum of issues we call environmental. To achieve this objective, however, means changes in our basic attitudes toward the environment and mankind's place in it.

That is why, in 1970, several colleagues and I in the House of Representatives introduced the Environmental Education Act, a bill to provide Federal funds to support elementary and secondary school courses in ecology as well as curriculum development and teacher training for environmental studies and community conferences on the environment for leaders of business, labor, and government.

As one of the principal authors of the environmental education legislation, I am encouraged that a national conference was held this year for the express purpose of increasing public awareness of environmental issues.

The conference, which was sponsored by the Western Regional Environmental Education Council and the Alliance for Environmental Education, met in July of 1975 at Snowmass, Colorado, and was attended by educators, ecologists, representatives of government agencies, of labor, industry, and business, and of environmental and conservation groups. The report

which follows contains the recommendations of the conference for strengthening educational programs on the environment. Included among the recommendations are:

-Wider dissemination of information about Federal environmental education programs.

-Support for and participation by environmental educators in the Federal Interagency Committee on Education.

-Increased cooperation on the part of labor, industry and business groups with schools and universities in community environmental education programs.

-Creation of state advisory committees on environmental education to provide advice and expertise for the development and implementation of state plans.

-Involvement of private conservation and environmental organizations in planning environmental education programs.

The delegates to the conference also stressed the importance of the exchange of information among different groups concerned with environmental education.

These recommendations indicate the concern of those who met at Snowmass for increased national cooperation and support for environmental education. I am, however, constrained here to observe that the present Administration in Washington, D.C. does not share this commitment.

Indeed, President Ford's budget requests for the 1976 fiscal year contained no funds at all for environmental education. Congress, on the other hand, by voting $3 million for the program has demonstrated its conviction that a citizenry educated about the environment can lay the basis for sound environmental policies.

It is from this background that I am pleased to commend this report to its readers.

JOHN BRADEMAS
Member of Congress, Indiana
Chairman, Select Education Subcommittee
Committee on Education and Labor
House of Representatives

ENVIRONMENTAL EDUCATION—PERSPECTIVES AND PROSPECTIVES

Key Findings and Major Recommendations

Introduction

In July 1975, at Snowmass, Colorado, a significant event took place in the field of environmental education. A number of people and organizations representing a wide range of environmental education interests and expertise came together to discuss the current status of the art, establish individual and common goals and objectives, and develop action strategies for achieving them.

Although the conference was sponsored by the Alliance for Environmental Education and the Western Regional Environmental Education Council, so much support and interest came from so many sources that the event must truly be seen as an almost spontaneous response to a widely felt need. After nearly seven years of more or less randomizing, the environmental education field was truly ready for what happened at Snowmass.

Although the basic concepts of environmental education have been evolving over many years, it was not until the late 1960's that the movement gained an identity and began establishing itself as a major educational concern. Growing out of work in the past in such areas as conservation education, outdoor education, and nature study, environmental education is concerned with the total environment, natural and man-made, and the relationship of people to it. The interrelationship of resource use and allocation, pollution, land use planning, and other factors are studied and the role of individual and social values in environmental decision-making is explored. One of the most significant aspects of environmental education is that it advocates an interdisciplinary process-oriented approach to problem solving.

Admittedly, these basic premises of environmental education have created a rather large tent under which many agencies, organizations and individuals have sought shelter. Formal school educators at all levels in many disciplines have chosen to become environmental educators, as have community group leaders, population control advocates, back-to-nature enthusiasts, and business and labor leaders, as well as representatives of a variety of local, state and federal governmental agencies. As might be expected, there is a wide diversity of approach, emphasis, and procedure evident in the programs advocated by these diverse agencies and interests.

The Alliance for Environmental Education, founded in 1972 under the leadership of the Conservation Education Association with

a grant from the Johnson Foundation, brought together a variety of regional and national private agencies and organizations which conduct environmental education activities. Among the 28 member organizations of the Alliance are such diverse groups as the National Wildlife Federation, League of Women Voters, American Forest Institute, National Education Association, Massachusetts Audubon Society, National Science Teachers Association, American Federation of Teachers and the National Association of Conservation Districts.

Through an ESEA Title V grant in 1971, a consortium involving resource management agencies and departments of education from 13 western states was set up. Although the federal grant has since expired, the resulting Western Regional Environmental Education Council is still hard at work as a non-profit corporation coordinating and facilitating programs throughout the region. Additional Title V grants have included Project NEED, based in New York, and a project involving four southeastern states administered by the North Carolina Department of Education.

A major source of information coordination is ERIC/SMEAC (Educational Resources Information Center for Science, Mathematics, and Environmental Education) located at The Ohio State University. A wide variety of materials from many sources is available as are several useful ERIC/SMEAC publications. This organization has also attempted to identify and catalog a variety of agencies and individuals involved in environmental education, and publishes a newsletter for state-level environmental education coordinators.

The Environmental Education Act of 1970 (Public Law 91-516) resulted in the establishment of an Office of Environmental Education in the U.S. Office of Education through which grants are made available to a variety of public and private agencies for formal school and informal public environmental education programs and projects. In addition to the grant program, the office was to provide technical assistance, coordinate programs, and otherwise serve the field. The Environmental Education Office has funded more then $8 million worth of projects over the past four years, and conducted a successful national conference on state planning in 1974. For a variety of reasons, including limited funding and inadequate staffing, the Environmental Education Office has been unable to live up to its full potential.

The recently established Federal Interagency Commission on Education (FICE) is studying federal environmental education activities and ways to improve interagency communication and coordination. Hopefully, this effort will result in better coordinated programs and more effective services to the field.

As these various efforts to provide some measure of coordination to the growing environmental education movement proceeded, it became evident that there were problems and issues which needed discussion and action, and that a national meeting involving a number of people active in the field would be valuable.

At the December 1974 board meeting of the Alliance for Environmental Education, at the suggestion of the Western Regional Environmental Education Council, it was decided that the Alliance in cooperation with WREEC would sponsor a conference on national environmental education issues. Thus the seed for the Snowmass Conference--Environmental Education Perspectives and Prospectives--was planted. Both organizations subsequently agreed to co-sponsor the conference, preliminary plans were developed, and a working committee set up. Names of members of the working committee are noted elsewhere in this report.

The work of the committee consisted of developing overall goals and objectives for the conference, developing a plan of action for the three-day session, inviting participants and attending to all of the routine housekeeping details necessary for a successful meeting.

The following statement of objectives was developed by the committee:

> The purpose of the conference is to bring together a select group of people representing a wide variety of expertise and interests in the field of environmental education to: (1) review the status of programs and accomplishments in the field; (2) identify ideals and develop objectives toward which we should be working; and (3) suggest ways and means for achieving these objectives.
>
> Specific issues in various fields of expertise will be studied and recommendations made to appropriate audiences. Major and overrriding concerns which affect a number of fields of expertise will be studied, and recommendations made to a number of audiences.
>
> The product of the conference will be a concise written report summarizing the findings and recommendations of the participants. The report will be distributed to designated general and specific audiences and will hopefully result in action directed toward channelizing and directing human, financial, and other resources into effective and coordinated environmental education programs throughout the nation.

The conference opened with an address of welcome by Dr. Leon Minear, Regional Commissioner, U.S. Office of Education in Denver, Colorado. Keynote speakers chosen by the committee to present a wide spectrum of environmental education ideas and opinions included:

Russel M. Agne, Assistant Professor Of Education, the University of Vermont, Burlington;

Edward Landin, Change Agency, St. Paul, Minnesota;

Noel McInnis, Environmental Education Consultant, Madison, Wisconsin;

Jerome Perlinski, Center for Future Development, Denver, Colorado;

Richard Rocchio, Center for Research and Education, Denver, Colorado;

Clay A. Schoenfeld, University of Wisconsin-Madison, Center for Environmental Communications and Education Studies.

Working sessions occupied most of the agenda. A final session was held to review the work of the committees and adopt the content to be used in developing the final report.

The work of the conference participants is summarized on the following pages. Complete reports of the working committees are printed in a second conference report, Environmental Education--Perspectives and Prospectives: Supporting Documentation. Also in that volume are summaries of keynote addresses.

Perhaps the most important outcome of the Snowmass conference was the realization on the part of a great number of environmental educators that if something needs doing, those directly concerned had better get busy and do it.

Snowmass was clearly a do-it-yourself project. People saw the need for the conference and responded in a variety of ways. Time, money, expertise, and other resources were contributed liberally by a variety of sources. Nearly everyone who attended made a personal sacrifice of some degree to participate.

And so for the 75 environmental educators who participated in the Snowmass Conference, this report is their achievement, and it merits widespread respect and consideration.

It is appropriate that this introduction should conclude with a recognition of those agencies and individuals who contributed in some degree to its success. As has been mentioned, overall sponsorship and coordination was provided by the Alliance for Environmental Education and the Western Regional Environmental Education Council. Dr. Leon Minear, Regional Commissioner, Region VIII, U.S. Office of Education, and his office provided considerable assistance, as did the U.S. Office of Education through Dr. David Phillips. Another major contributor to the success of the project was the Weyerhaeuser Corporation Foundation which provided much needed funding to cover various necessary conference expenses.

It would be nearly impossible to list all of the agencies and individuals who were responsible in some degree for the success of the conference. Rather than run the risk of leaving someone out, we will restrict individual recognition to those agencies thus far listed, and recommend a study of the conference roster for additional

information. In most cases the agencies listed supplied travel funds and/or the professional time of the conference participant listed. Our thanks to all those who helped us in this and many other ways.

Certainly a word of thanks is due Lynda Haring, my secretary, who handled nearly all of the correspondence, agendas, reports, schedules and other material necessary for the conference and produced the working drafts of the final report.

Rudolph J. H. Schafer
Conference Chairman
Consultant in Environmental Education
California Department of Education
721 Capitol Mall
Sacramento, CA 95814

November 1975

KEY FINDINGS AND MAJOR RECOMMENDATIONS

The purpose of the conference was to produce a report which would draw attention to specific problems and concerns in the environmental education field and offer suggestions for solving them. The publication of this report should, therefore, be considered a beginning and not an end in itself. The success of the project must ultimately be measured by its long term effect upon the field. Were the recommendations sound? Were they implemented? Did they make a difference? These are the questions which will have to be answered over the long term.

Hopefully, this report will be widely read and studied. Of our audience we ask the question, "What can or will you do to help solve the problems identified?" Unless there is a broad commitment to intelligent and effective action, all the work which went into the conference at Snowmass will have been in vain.

Two procedural recommendations approved by conference participants should be noted: The first of these concerned adoption of the working committee reports. Each was read aloud in a general session, amendments made and a vote taken for or against its inclusion in the final report. Once approved by the entire group, it was agreed that each report then became the statement of the entire conference rather than that of any one specific committee.

A second procedural resolution concerned minority reports. If any participants felt there was a need for such a statement, they were encouraged to prepare and submit them. It was further agreed that minority reports representing the opinions of a substantial number of conference participants--at least 10 percent--would be included in the final conference report. It should be noted that none was received.

On the following pages the key findings and major recommendations of the conference are summarized. These are <u>not</u> committee reports, <u>per se</u>, but a distillation and amalgamation of all the work of all the participants at the Snowmass Conference. Additional recommendations, the detailed rationale behind each, background papers, summaries of speeches made at the conference, and other supporting material are contained in a second conference report, <u>Environmental Education Perspectives and Prospectives: Supporting Documentation</u>.

1. Environmental Education: Roles, Responsibility, Definitions, Methodology

<u>Finding</u>: Far too many of its practitioners consider environmental education an end in itself, rather than as a means

of changing the environmental behavior of people and thereby improving environmental quality.

Recommendation: Environmental educators must recognize that the major long term goal of their efforts is the development of responsible environmental behaviors at all levels of American society and that all projects, programs and activities should be directed toward this end.

Finding: There is much confusion and debate among those in the field concerning the definition of the role of the environmental education specialist.

Recommendation: Ideally an environmental educator is a person who possesses broad expertise in a number of discipline areas, is skilled at working with learners, and is capable of providing those specific learning activities unique to the environmental education field. These include:

- Providing real and simulated experiences through which learners explore and assess their concerns, needs, questions and problems.

- Helping learners discover relevant answers and solutions based on these experiences.

- Furnishing the learner with human and material resources which will assist him in validating, conceptualizing and expanding upon his discoveries.

- Aiding learners in planning for new experiences which expand their skills and knowledge while raising still more questions and concerns.

The environmental education specialist is, therefore, a facilitator-specialist, as well as an interpreter, who helps the learner discover and meet his own needs, utilizing content appropriate for the moment.

Finding: Environmental educators show a fondness for seeing issues in an unrealistic "either/or" context rather than in more practical "both/and" relationships. Examples of such short-sighted thinking noted at this conference include:

- The question of methodology versus content.

- Individual life style and grassroots community programs versus broadly structured and highly organized efforts.

- Messianic zeal to solve environmental problems immediately and at all costs versus a careful consideration of the political, social, cultural and economic factors involved in each issue.

Recommendation: Squabbling over chicken-and-egg or angels-on-the-head-of-a-pin sophistries and taking overly simplified "either/or" positions on highly complex environmental issues tend to reduce public confidence in the efforts of environmental educators and obscure the real goals toward which we should be striving. The field is better served when environmental educators respect the honest efforts of all others in the field, and avoid taking extreme, inflexible positions on issues.

2. **Elementary and Secondary Education**

Finding: The most critical issue facing all humanity is the maximization of individual life styles within the constraints imposed by a planet with a finite carrying capacity. Education has a major role to play in helping society to reconcile this dilemma.

Recommendation:

- Elementary and secondary educators, administrators, and all others concerned with the education of children should accept responsibility for the development of an environmentally literate citizenry which possesses the skills, attitudes and knowledge necessary to identify and solve environmental problems, and learn to live in harmony with the ecosystem.

- Educators at all levels have a responsibility to work to secure the necessary human and material resources and work to establish a support system for an effective environmental education program.

- Educators should be working toward the evolution of a society which understands and is willing to live within the constraints imposed by the fundamental laws of ecology.

Finding: There are a number of funding programs for a variety of stated purposes sponsored by the federal government, state agencies, and private foundations. Although many do not specify environmental education per se, the wide interdisciplinary scope of the field permits many opportunities for obtaining grants which are not always evident. For example, Title I multi-cultural programs present an opportunity to explore how various cultures view and solve environmental problems, or did so in the past. Ethical problems can be explored in the same context. Reading improvement programs can be developed which utilize environmentally sound materials. ESEA Title V (now a part of Title IV) funds can be used for state environmental education planning. In some cases, Title I funds have been used to fund resident outdoor school programs.

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Recommendation: The various grant programs should be studied by environmental educators with a view toward discovering environmental education possibilities not previously noted. Perhaps a national survey could be made which would point out innovative ways of funding environmental education programs not widely known.

3. **Higher Education**

Finding: The primary goal for higher education should be the incorporation of a strong emphasis on concern for the environment in all programs and activities utilizing all resources available to each respective institution.

Recommendations with respect to resident instruction in environmental education:

- All institutions of higher education should include in their general education programs broad opportunities for students to have interdisciplinary experiences concerned with environmental issues, problems, and systems in order to produce environmentally literate citizens.

- Undergraduate, graduate, and technician-training programs of study for pre-professionals and professionals in environmental areas should incorporate methods of instruction and materials which provide students a total systems orientation to environmental issues and problems and their potential solutions through specialized preparation.

- Programs designed for the preparation of professional environmental educators should require a sound knowledge of several related disciplines such as economics, political science, environmental biology, psychology, or others.

Recommendations with respect to research conducted by institutions of higher education:

- Environmental education research efforts should focus on behavioral change of students, teachers, and the general public.

- Process research should be concentrated on changes required to move from awareness to participation, assuming a fair level of awareness.

- Environmental education should draw upon the variety of disciplines available throughout the structure of institutions of higher education in its research efforts.

- A panel of researchers in environmental education should be charged with setting criteria for identification of long range issues in environmental education and strategies for approaching them.

Recommendation with respect to outreach education:

- Institutions of higher education should design courses, workshops and programs which allow participants to capitalize on their individual academic and experiential backgrounds so that they are better equipped to cope with environmental concerns.

Recommendation with respect to the social responsibility of institutions of higher education:

- During the latter part of the twentieth century all post-secondary institutions should reevaluate their mission statements to determine if their policies include strong commitment to public services and concern for the environment.

4. The Federal Government

Finding: The human and financial resources allocated to environmental education from public and private sources are for the most part insufficient to accomplish the work which must be done. Support for environmental education programs and activities by the federal government is glaringly inadequate.

Recommendation: The President and the Congress of the United States should be urged to demonstrate increased concern for the environment by allocating to the several educational, regulatory, and resource management agencies fiscal and personnel resources more commensurate with the urgency of the nation's environmental problems and the need for an informed public.

Finding: There is widespread dissatisfaction among environmental educators with respect to levels of funding, grant administration procedures, and technical assistance functions provided under the national Environmental Education Act.

Recommendation: The concept of the Environmental Education Act is sound and merits the support of all environmental educators. This recommendation is not, however, to be considered as an endorsement of the present Congressional financial support for the program, or for the current administration of the law. The need for a definitive statement of a national environmental education policy should not be sabotaged by dissatisfaction with the level of funding or administrative operation.

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Finding: The recently created Federal Interagency Committee on Education (FICE), created by Executive Order 11761 (January 1974) has as its purpose expediting cooperation among federal agencies with respect to educational matters, and coordinating programs whenever possible. A subcommittee on environmental education has also been created.

Recommendation: The work undertaken by FICE is of major importance, and the support and participation by all appropriate federal agencies and officials is highly recommended. Support and participation by environmental educators outside the federal government is also recommended as appropriate.

Finding: The Subcommittee on Environmental Education of the Federal Interagency Committee on Education does not have representation of all federal agencies which have interest and expertise in environmental education.

Recommendation: The FICE Subcommittee on Environmental Education should be expanded to include representation from agencies such as Health, Education and Welfare, Housing and Urban Development, Commerce, Treasury, Labor, Defense, Energy Resource Development and other appropriate agencies.

Finding: For the most part, federal government agencies are not communicating effectively with the general public and non-federal organizations and agencies, nor are federal government agencies adequately receptive to citizen input.

Recommendation: That federal agencies increase their sensitivity to citizen input, seeking a partnership in the decision-making process through:

- Utilizing every possible method of communication.
- Monitoring input from the point of policy formulation to implementation of action programs.
- Evaluating systematically the effects of action programs to insure that these effects are responsive to public needs, thus keeping programs current.
- Increasing efforts to inform the public of the opportunities and mechanisms that make available information and assistance from those agencies.

5. State Governments

Finding: Generally speaking, effective cooperation between federal agencies, between state agencies, and between federal and state agencies on environmental education rarely occurs. There are some notable exceptions, of

course, but these bright spots are for the most part due to the hard work of individuals and are sometimes carried out in spite of the bureaucracies, rather than as a result of official efforts at coordination.

Recommendation: Each state should set up a function similar to FICE, to be charged with the following responsibilities:

- Inventorying the environmental education resources available from the various state governmental agencies, and developing a plan for the efficient utilization of these resources at all levels.

- Working with appropriate agencies in neighboring states to coordinate efforts, share information, and develop joint programs, activities, and materials as appropriate.

- Cooperating with FICE and other appropriate organizations to coordinate state and federal environmental education programs.

Recommendation: State agencies are urged to demonstrate leadership and commitment for environmental education in the following specific ways:

- By developing a policy statement or similar written declaration of the agencies' position on environmental education and fixing responsibility for the agency program.

- By participating in a variety of educational activities including teacher training, curriculum and materials development, technical assistance and materials distribution and by making environmental study sites and facilities available for educational purposes.

- By making state legislators and other appropriate officials aware of the environmental education needs of the agency, the status of programs underway, and by including in budget requests adequate funds for effective programs.

- By setting up cooperative working relationships with other agencies so that more effective programs may be developed and offered. Interagency coordinating committees have proved effective for this purpose in many cases and should be considered.

Finding: We deplore the fact that twelve of the states have not yet developed any kind of environmental education plan, and few of the thirty-eight states which have developed such plans have taken any action toward implementation.

Recommendation: Each state should provide the human and

material resources and high-level leadership necessary to develop and implement an effective environmental education plan. State plans should identify both formal school and informal public education needs, inventory available resources, and set up priorities and a timetable for a program of coordinated and effective action.

Finding: Several states have advisory councils for environmental education which include representation from the governor's office, state and federal agencies, volunteer organizations including community groups, private agencies, business, labor, industry, higher education, elementary and secondary education, students at various levels, and minority groups.

In most cases these committees have proved to be most valuable in stimulating the development and coordination of programs, and in establishing a strong base of public support for environmental education.

Recommendation: A state advisory committee representing a wide variety of environmental education interests and expertise should be appointed by the governor or similar high official or body, and should be charged with the following responsibilities:

- State planning
  1. Review of present status of state environmental education planning as well as programs in other states.
  2. Development of a state plan or modification of an existing one.
  3. Development of implementation strategies and assistance with program as appropriate.
  4. Periodic review and evaluation of the state plan and its implementation.

- Other suggested activities
  1. Review of applications for federal and state grant programs.
  2. Assistance in statewide student activities such as the EPA-sponsored Presidential Environmental Merit Award Program.
  3. Serving as a public forum for new ideas, programs and various environmental education activities at all levels.
  4. Providing expertise, advice, and information to state officials, legislators, state and local board of education members, and the media as appropriate.

Finding: Advisory committees are most effective when they serve to encourage and support the development and implementation of effective programs at all levels by those charged with responsibility for them.

Recommendation: Advisory committees should not be considered action committees with responsibilities for program implementation. The agency or official responsible for establishing the advisory committee should develop a charge setting forth its responsibilities, methods of reporting, meeting schedule, staff support, and other pertinent matters.

6. **Labor, Industry, and Business**

Finding: Labor, industry and business recognize that their participation in environmental education is a desirable and necessary expression of social responsibility and is integral to their enlightened self-interest, and that environmental educators should recognize and use the expertise of labor, industry, and business in political, economic, and technological processes.

Recommendation: Labor, industry, and business should continue to provide educationally sound services for environmental education;

Recommendation: Labor, industry, and business should develop cooperative relationships at the national, state and local levels between themselves and formal education institutions, pre-school through higher education; and

Recommendation: Labor, industry, and business should provide environmental education leadership and direction for reaching the community, especially adults, where they work, live, meet and play.

7. **Private Environmental Organizations***

Finding: Most private conservation and environmental organizations have a two-fold interest in environmental education. First, the success of their programs is very much dependent upon informed and supportive publics. Secondly, most such organizations are, and have historically been, engaged in some form of formal school or informal public educational activity.

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*Members of the Private Environmental Organization interest group have indicated that this summary, while essentially correct, does not contain sufficient detail for adequate development of group concerns. A more comprehensive treatment of the group's position is presented in the Interest Group Report section of Environmental Education Perspectives and Prospectives: Supporting Documentation. This is, of course, also true for other groups.

The most effective environmental education role for private environmental and conservation organizations is serving as a "cutting edge" for the movement:

- by being innovative;
- by being critical of what is being done;
- by examining, evaluating, and even providing a forum for unpopular or far-out ideas;
- by probing, prodding, and proposing alternatives; and
- by attempting new modes of planning and execution.

Recommendation: Private conservation and environmental organizations should examine their respective roles and involvement in environmental education and develop official policies outlining areas of activity, fixing responsibility for appropriate action. Recommended questions to be addressed while developing such policies include:

- How best can this organization assist the various publics in learning how to identify, study, and solve environmental problems?
- How best can this organization help its own members grow in their understandings of environmental problems and effective means of solving them?
- How best can this organization work with other environmental and conservation organizations to coordinate and synergize their efforts?
- How best can this organization make elected and appointed officials, the media, environmental professionals, and the general public aware of the needs in environmental education, and the importance of their support for worthwhile programs?
- How best can this organization expand and reinforce the public's understandings of environmental systems?
- How best can this organization provide an outlet for individual and group volunteer activity to improve environmental conditions?
- How best can this organization act as an informed monitor of government and industry in the implementation of environmental legislation and regulations?
- How best can this organization serve as an early warning system to identify potential environmental problems?

- How best can this organization provide opportunities which will lead members and non-members to develop higher levels of environmental awareness, understanding, concern, and action?

- How best can this organization act as an ideological condensation point for various environmental attitudes, values, and work views?

- How best can this organization provide training and retraining experiences for preservice and inservice teachers in environmental education?

8. Communications and Dissemination

Finding: Environmental education communications--books, studies, reports, media presentations, kits, conferences and other materials--are increasing rapidly in both volume and variety with the result that keeping abreast of the field has become a major problem for the environmental education professional.

Recommendation: Environmental educators must find ways and means of strengthening and improving communication and dissemination activities within the field, if efforts with students and the general public are to be effective. Specific points to be considered include:

- Utilizing the communication and dissemination mechanisms already existing--ERIC, Environmental Education Report, Journal of Environmental Education, federal and state agencies, newsletters from a variety of sources, libraries, etc.--for the benefit and advancement of environmental education programs.

- Facilitating direct communication among environmental educators.

- Working with the press and media to ensure a balanced coverage of environmental concerns.

- Identifying funding sources for the production and dissemination of environmental education materials, print and non-print.

9. Leadership in Environmental Education

Finding: There is a need for a widely accepted national environmental education leadership group through which services essential to the field can be provided.

Recommendation: The board of directors of the Alliance for Environmental Education should recognize the need for

effective national leadership in the field and develop the potential of this organization for supplying it. Specific action recommendations for the Alliance include:

- Developing a mechanism through which the interests and concerns of the field can be represented to the political and business communities.

- Changing the organizational bylaws so that all of the interests represented at Snowmass--state agencies, business and industry, elementary and secondary education, higher education, federal agencies and private conservation organizations--can be represented by the Alliance.

- Establishing a coordinating group within the expanded Alliance to follow up on the Snowmass recommendations.

- Assisting the establishment of groups similar to the Alliance at the state level.

Finding: A need exists for re-examination of the objectives, operational goals and procedures of those holding leadership positions in environmental education at the federal level.

Recommendation: Such a re-examination should be addressed to the following questions:

- Is it necessary or desirable that the federal government assume a major leadership role in environmental education?

- How will the promulgation of a taxonomic set of environmental concepts be accepted by teachers, when almost all previous attempts in various discipline areas have been rejected by them?

- Would the existing subcommittee on Environmental Education of the Federal Interagency Committee on Education be improved by representation from additional federal agencies?

- How may leaders in environmental education, within and outside of the federal government, in and outside of Washington, exchange information?

- Is it always the federal government's role to set policy, or can it be to act as a resource?

Finding: Recognizing that the allocation of resources is a direct indication of the importance which agencies and institutions attach to various programs, information as

to funding for environmental education at all levels--local, state and federal--and its effect on the quality and quantity of programs offered, is needed.

Recommendation: A survey should be undertaken of both the public and non-public sectors to gather current data concerning support for environmental education for use by policy and decision makers at all governmental and private levels. This recommendation is addressed specifically to the Alliance for Environmental Education and to the Council on Environmental Quality.

Finding: While meetings such as the 1975 Snowmass Conference tend to produce great enthusiasm among participants, particularly while such conferences are in session, interest often wanes and no significant impact is made on the subsequent actions of participants or on the larger community.

Recommendation: Representatives who participated in this national conference should use all means possible--conferences in their locality, written and oral reports, press releases, etc.--to communicate information and recommendations to the widest possible audience. Follow-up and feedback information gained by these state level communication efforts should be transmitted to the Alliance for Environmental Education for further action.

Finding: The report of the 1975 Snowmass Conference will be meaningful only if it stimulates constructive responses at the action levels of the environmental education community.

Recommendation: The report of the conference should not be viewed as an ultimate product, but as a means of communicating the collective judgments of conferees to those--citizens, the private sector, educational institutions, and legislative and executive branches of government at all levels--who can utilize the report in taking actions that will enhance environmental quality.

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State Departments of Education and Resource Management Agencies - David Kennedy, Washington State Department of Public Instruction.

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Elementary and Secondary Education - Alice Cummings, National Education Association.

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